STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0046809** ; **AI 43424; PER20050001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Town of Sterlington
Sterlington Wastewater Treatment Facility
P.O. Box 1000
Sterlington, LA 71280

II. **PREPARED BY:** Ronda Burtch

DATE PREPARED: March 30, 2007

III. **PERMIT ACTION:** reissue LPDES permit LA0046809, AI 43424; PER20050001

LPDES application received: December 12, 2005

LPDES permit issued: June 1, 2001
LPDES permit expired: May 31, 2006

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from publicly owned treatment works serving the Town of Sterlington.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located south of LA Hwy. 2 in Sterlington, Ouachita Parish.

D. The treatment facility consists of a three-cell oxidation pond. Disinfection is by chlorination.

E. Outfall 001

Discharge Location: Latitude 32° 41' 17" North
Longitude 92° 04' 10" West

Description: treated sanitary wastewater

Design Capacity: 0.15 MGD

Type of Flow Measurement which the facility is currently using:

Continuous Recorder

Please note that if the facility grows to a discharge beyond the design capacity of the facility, additional sewage treatment may be required with prior approval of the facility's plans by the Louisiana Department of Health and Hospitals and notification must be submitted to the LDEQ. Also, if the expected flow reaches or exceeds the design capacity of the facility, a permit modification may be required.

V. RECEIVING WATERS:

The discharge is into the Ouachita River in segment 080101 of the Ouachita River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 080101 of the Ouachita River Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment 080101	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Full	Full	Not Supported	N/A	Full	N/A	N/A

[1/]The designated uses and degree of support for Segment 080101 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 080101 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Ronda Burtch
Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 080101, Ouachita River - Arkansas State Line to Columbia Lock and Dam (Scenic from the Arkansas State Line to intersection with Bayou Bartholomew--22 miles), is not listed on LDEQ's Final 2004 303(d) List as impaired. However subsegment 080101 was previously listed as impaired for mercury, organic enrichment/low DO, nutrients, and phosphorus, for which the below TMDLs have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving waterbodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 080101:

Ouachita River TMDL for Biochemical Oxygen-Demanding Substances and Nutrients

Per the TMDL, "The projections indicate that the river is dominated by nonpoint but that point source impacts are significant. The minimum dissolved oxygen occurs in a portion of the river just upstream of the dam at Riverton, where the river velocities are lowest. In order to meet the August DO criteria of 4.5 mg/l it was necessary to reduce headwater loading by 15 percent, and nonpoint loading by 30 percent. It was also necessary to reduce the loading from Riverwood Outfall 001, Judy Slough, by 15 percent. Other point source discharges can remain at their current permit limits. No reductions were required for the winter season." Since the TMDL did require this facility to reduce its loading, limitations will remain as previously permitted.

TMDLs for Segments Listed for Mercury in Fish Tissue for the Ouachita River Basin, and Bayou Bartholomew, Arkansas and Louisiana to Columbia

Per the TMDL, "The analysis of NPDES point sources in the watershed indicates that the cumulative loading of mercury from these facilities is less than 1% of the total estimated current loading. Even if this TMDL were to allocate none of the calculated allowable load to NPDES point sources (i.e., a wasteload allocation of zero), the applicable water quality standards for mercury would not be attained in the waterbody because of the very high mercury loadings from nonpoint and background sources. At the same time, however, EPA recognizes that mercury is an environmentally persistent bioaccumulative toxic with detrimental effects to human fetuses even at minute quantities, and as such, should be eliminated from discharges to the extent practicable. Taking these two considerations into account, this TMDL, therefore, provides that mercury contributions from the city municipal WWTPs not exceed the mercury water quality standard for Arkansas and Louisiana (12 ng/L). No change in mercury limits is provided for the NPDES point source with permit limits for mercury."

A review was conducted of the Town of Sterlington's wastewater treatment facility's non-residential customers (See attached list) to identify potential sources of mercury to the wastewater treatment system.

This review did not demonstrate a significant number of non-residential customers recognized as potential sources of mercury to wastewater treatment systems.

The Town of Sterlington WWTF has a design capacity of 0.15 MGD. This facility was not considered a major, significant point source discharge to the Ouachita River Basin in the TMDL. Based on this review and assessment it is determined that the discharge from the Town of Sterlington Wastewater Treatment Facility does not possess the reasonable potential for exceedance of numeric mercury water quality standards and no effluent limitations or requirements for mercury will be placed in the permit at this time.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD_5	38	30 mg/l	45 mg/l	Limits are set in accordance with an administrative update between the Department and EPA in a letter dated July 24, 1987 and the previous permit.
TSS	113	90 mg/l	135 mg/l	Limits are set in accordance with an administrative update between the Department and EPA in a letter dated July 24, 1987 and the previous permit.

Other Effluent Limitations:

1) ***Fecal Coliform***

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0046809: Issued: June 1, 2001
Expired: May 31, 2006

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD_5	30 mg/l	45 mg/l	2/month	Grab
TSS	90 mg/l	135 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed during the period beginning March 19, 2005 and ending March 19, 2007 for this facility.

Date: January 9, 2006
Inspector: LDEQ
Findings and/or Violations:

1. A review of DMRs and lab results from June 2005 to December 2005 revealed the following exceedances:
   a. Sept. 2005 BOD = 41.28 *ppm mo avg*; TSS = 126.25 *ppm mo avg*, 155.5 *ppm wk* avg
   b. Oct. 2005 BOD = 44.36 lbs/day mo avg, 72.93 ppm mo avg, 79 ppm wk avg.; TSS = 127 ppm mo avg
   c. Nov. 2005 TSS = 99 ppm mo avg; BOD = 55.05 ppm wk avg, 51.6 ppm mo avg
   d. Dec. 2005 BOD = 54.6 ppm wk avg, 41.58 ppm mo avg
2. Facility is composed of a three-cell oxidation pond which serves the town of Sterlington. Design capacity is 0.15 mgd. Facility is fenced and well-maintained. A new fine bubbler diffuser system is being installed.
3. Facility is a minor municipal 92500 site. The permit was issued 6-1-01 and the renewal application was submitted on 12-7-05.
4. Facility discharges occasionally throughout each day as a wet well fills up and the pumps kick on. Facility personnel turned on the pumps for the purpose of the inspection. The effluent was clear with green tint. Chlorination is used.
5. The flow meter was operational and calibrated on 6-29-05.
6. Warning Letter WE-L-05-0475 was issued on 10-17-05 due to a 6-22-05 inspection.
7. Records and reports were on-site, well organized, and made available. DMRs are submitted.
8. Samples are taken by city personnel and analyzed by Monroe Environmental Labs.
9. No overflows were reported in the collection system.

Date: June 22, 2005
Inspector: LDEQ
Finding and/or Violations:

1. Permit excursions occurred on 02/05, 12/04, 11/04, 10/04, 09/04, 08/04, 07/04, and 06/04.
2. One or no sample taken on 10/04, 09/04, 08/04, 07/04, 06/04; permit requires two.

Date: January 30, 2007
Inspector: LDEQ
Findings and/or Violations:

1. The Design Capacity of 0.15 MGD was exceeded for the months and year of 08/06 (MM/YY), 10/06, 11/06, and 12/06.

2. The BOD5 permit limitation was exceeded for the months and year of 01/06, 02/06, 03/06, 04/06, 05/06, 11/06, and 12/06.
3. The TSS permit limitation was exceeded for the months and year of 01/06, 02/06, 03/06, 04/06, 05/06, 06/06, 07/06, 08/06, 09/06, 11/06, and 12/06.
4. The flow meter was inoperable / in disrepair for the month of 07/06 and the DMR states "no discharge"; however, sample measurements were reported on the DMR.
5. The sample measurement data on the DMRs for the concentration averages were inconsistent with the sample analysis results; whereas, the concentration averages were not being flow weighted.

B) Compliance and/or Administrative Orders

A review of the files indicates that there are no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January 1, 2005 through December 31, 2006 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
January 2005	BOD_5, Monthly Loading	58.01 lbs/day	38 lbs/day
	TSS, Monthly Loading	152.13 lbs/day	113 lbs/day
February 2005	BOD_5, Monthly Loading	59.77 lbs/day	38 lbs/day
	TSS, Monthly Loading	144.37 lbs/day	113 lbs/day
	Fecal Coliform, Weekly Avg.	576 col/100 ml	400 col/100 ml
March 2005	BOD_5, Monthly Loading	49.85 lbs/day	38 lbs/day
	TSS, Monthly Loading	142.97 lbs/day	113 lbs/day
September 2005	BOD_5, Monthly Avg.	41.28 mg/l	30 mg/l
	TSS, Monthly Avg.	126.25 mg/l	90 mg/l
	TSS, Weekly Avg.	155.5 mg/l	135 mg/l
October 2005	BOD_5, Monthly Loading	44.36 lbs/day	38 lbs/day
	BOD_5, Monthly Avg.	72.93 mg/l	30 mg/l
	BOD_5, Weekly Avg.	79 mg/l	45 mg/l
	TSS, Monthly Avg.	127 mg/l	90 mg/l
November 2005	BOD_5, Monthly Avg.	51.6 mg/l	30 mg/l
	BOD_5, Weekly Avg.	55.05 mg/l	45 mg/l
	TSS, Monthly Avg.	99 mg/l	90 mg/l
December 2005	BOD_5, Monthly Avg.	41.58 mg/l	30 mg/l
	BOD_5, Weekly Avg.	54.6 mg/l	45 mg/l
January 2006	BOD_5, Monthly Loading	38.9 lbs/day	38 lbs/day
	BOD_5, Monthly Avg.	66.7 mg/l	30 mg/l
	BOD_5, Weekly Avg.	86.5 mg/l	45 mg/l
	TSS, Monthly Avg.	118.75 mg/l	90 mg/l
	TSS, Weekly Avg.	144 mg/l	135 mg/l
February 2006	BOD_5, Monthly Avg.	34.58 mg/l	30 mg/l
	TSS, Monthly Avg.	143.25 mg/l	90 mg/l
	TSS, Weekly Avg.	146 mg/l	135 mg/l
March 2006	BOD_5, Monthly Avg.	31.56 mg/l	30 mg/l
	TSS, Monthly Avg.	134 mg/l	90 mg/l
	TSS, Weekly Avg.	138 mg/l	135 mg/l
April 2006	BOD_5, Monthly Avg.	48.1 mg/l	30 mg/l
	BOD_5, Weekly Avg.	48.1 mg/l	45 mg/l
	TSS, Monthly Avg.	177.5 mg/l	90 mg/l
	TSS, Weekly Avg.	199 mg/l	135 mg/l

May 2006	BOD_5, Monthly Avg. TSS, Monthly Loading TSS, Monthly Avg. TSS, Weekly Avg.	39.35 mg/l 130.59 lbs/day 206.75 mg/l 227 mg/l	30 mg/l 113 lbs/day 90 mg/l 135 mg/l
June 2006	TSS, Monthly Loading TSS, Monthly Avg. TSS, Weekly Avg.	140.22 lbs/day 261 mg/l 290 mg/l	113 lbs/day 90 mg/l 135 mg/l
July 2006	TSS, Monthly Avg. TSS, Weekly Avg.	327.5 mg/l 394 mg/l	90 mg/l 135 mg/l
August 2006	TSS, Monthly Avg.	104.5 mg/l	90 mg/l
September 2006	TSS, Monthly Avg.	98 mg/l	90 mg/l
November 2006	BOD_5, Monthly Loading BOD_5, Monthly Avg. TSS, Monthly Loading TSS, Monthly Avg.	51.55 lbs/day 39.15 mg/l 150.43 lbs/day 113 mg/l	38 lbs/day 30 mg/l 113 lbs/day 90 mg/l
December 2006	BOD_5, Monthly Loading BOD_5, Monthly Avg. BOD_5, Weekly Avg. TSS, Monthly Loading TSS, Monthly Avg.	51.19 lbs/day 40.7 mg/l 55.2 mg/l 179.62 lbs/day 116 mg/l	38 lbs/day 30 mg/l 45 mg/l 113 lbs/day 90 mg/l

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.15 MGD.

Effluent loadings are calculated using the following example:

BOD: 8.34 lb/gal x 0.15 MGD x 30 mg/l = 38 lb/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are in accordance with the previous permit.

Effluent Characteristics	Monitoring Requirements Measurement Frequency	 Sample Type
Flow	Continuous	Recorder
BOD_5	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Sterlington, Sterlington Wastewater Treatment Facility, December 12, 2005.